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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Akira Murakami

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NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

EXAMINER

LOPEZ, CARLOS N

ART UNIT

PAPER NUMBER

1731

DATE MAILED: 01/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/058,236	MURAKAMI, AKIRA	
	Examiner	Art Unit	
	Carlos Lopez	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
☛ Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1) Claims 1, 6, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Inoue et al (JP 63-265833). Inoue discloses a method for producing substrate blank. As shown in figure 2 of Inoue, a glass substrate 14, in a softened state, is manufactured by a pressing molding method. The method comprises an upper mold 11 and lower mold 12 having the glass substrate being pressed in between the two molds. The surrounding edge portion of the substrate 14 is free as shown in figure 2, since the surrounding edge does not come in contact with any mold surface or mold part and thus not having surface marks on the surrounding edge.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2) Claims 2-3, and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al (JP 63-265833) in view of Murakami et al JP 10-236831 (for which US 6,442,975 is taken as the JP equivalent). Inoue is silent disclosing a substrate blank

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having a flat front and reverse sides. However, the shape of the substrate would depend on its intended use. As shown by Murakami, glass blanks having a flat front surface are used as substrates for a recording medium. Hence, at the time the invention was made it would have been obvious to a person of ordinary skill in the art to form the glass substrate of Inoue with a flat front and reverse surfaces in order to use the glass substrate as a recording medium. Hence, the claimed positive active steps to form glass substrates with varying shapes is only indicative of the intended use of the glass substrate merely varying the shape of the mold but performing the active steps claimed.

As for claim 2, the claimed flat front surface, reverse surface and a surface formed of the surrounding edge portion is deemed respectively as the top surface, bottom surface and edges surface the Murakami's glass blank 44.

As for claim 3, Murakami teaches that the glass substrate blank 44 has a thickness greater than the final product, which is the claimed glass substrate (Col. 15, lines 59-60).

As for claim 6, the soften glass is supplied to the lower mold as shown in figure 7A.

As for claim 7, the molds have a temperature of 250-450 degrees Celsius for the upper mold and the lower mold having a temperature 50 to 100 degrees lower than the upper mold wherein the temperature of the softened glass is 1200 degree Celsius (Col 10, lines 50ff).

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As for claims 8-9, the glass is pressed molded to have a disk shape with a thickness of 2-4 mm (Murakami Col. 2 lines 64ff). As shown in figure 10 the circumferential edge of glass blank 44 does not touch the mold dies 17 and 14 as it is being pressed formed.

3) Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al (JP 63-265833) in view of Suzuki (JP 10-194760). Inoue is silent disclosing the claimed large and small thickness portion. However, Suzuki figures 2 and 7 show a thicker portion at the middle and edges of a substrate blank eliminate warpage of a press formed glass. Hence, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have provided a substrate blank having a thicker portion at the middle and edges of Inoue's glass blank as taught by Suzuki in order to eliminate warpage

4) Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al (JP 63-265833) in view of Murakami et al JP 10-236831 (for which US 6,442,975 is taken as the JP equivalent) as applied to claim 3 above and in further view of Suzuki (JP 10-194760). Inoue is silent disclosing a substrate blank having the claimed small and large thickness portions recited in claim 5. However, Enomot teaches that glass substrates having the claimed large and small portions as recited in claim 5 prolongs the service life of the molds, shorten process time and provides a glass substrate with excellent shape accuracy . Hence, at the time the invention was made it would have

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been obvious to a person of ordinary skill in the art to form the glass substrate of Inoue with the claimed small and large portions as taught by Enomot in order to prolong the service life of the dies, shorten process time and provide a glass substrate with excellent shape accuracy .

5) Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al (JP 63-265833) in view of Murakami et al JP 10-236831 (for which US 6,442,975 is taken as the JP equivalent). Murakami teaches that the glass blank may be grinded and polished (Col. 7, lines 19ff). However, Murakami is silent on cutting the glass blank. The Murakami method is for the production of a recording medium such as a CD. Since CDs currently have a hole at the center it would be obvious to a person of ordinary skill in the art at the time the invention was made that a cut would be expected on the glass blank disc in order to form the hole of an information recording medium CD.

As for claim 12, Murakami teaches of using crystallized glass as the glass substrate, see col. 7-8, and hence would require a heat treatment.

In regards to claim 13's limitation of forming an information layer on the substrate, Murakami teaches of laminating a magnetic layer on the substrate (Col. 7, line 57ff).

Response to Arguments

Applicant's arguments filed 11/14/05 have been fully considered but they are not persuasive.

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Applicant argues that Inoue's circumference of the glass blank comes in contact element 15. However, element 15 is the supporting member holding the glass blank which as explicitly shown in figure 2 does not contact the circumference of the glass blank.

In regards to applicant's argument presented in the second full paragraph of page 3, regarding undulation, it is noted that the features upon which applicant relies (i.e., undulation removal) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant alleges that the prior art reference '919, which Inoue notes as being depicted by figure 2, states that the glass molded product has its circumferential portion supported. A reading by the USPTO translator does not support applicant's allegation that the circumferential portion is supported. Even if applicant considers that support member 15 is providing a circumferential support, applicant is reminded that claim 1 recites that a mold member does not contact the surrounding edge portion or, alternatively, by parts used in the press molding, i.e. member 15. Thus at the very least claim 1 is read by Inoue in disclosing that the edge of the molded glass is not touched by mold members 11 and 12.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is 571.272.1193. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571.272.1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, consisting of a stylized 'L' followed by a 'Z'.